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March 15, 1993

Mr. William Bolen
Waste Management Division
Office of Superfund
IL/IN Remedial Response Branch, HSRL-6J
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

Re: Waukegan Coke Plant Superfund Site

Dear Mr. Bolen:

This letter summarizes the agreements reached at the March 5, 1993 meeting of representatives and consultants to North Shore Gas, the U.S. EPA, and the Illinois EPA. This letter briefly summarizes the agreed scope and nature of changes to the Remedial Investigation/Feasibility Study Phase I Technical Memorandum, dated August 1992 (Phase I Tech Memo), and the Technical Memorandum, Proposed Modeling for RI/FS, dated July 1, 1991 (Modeling Tech Memo). The letter first summarizes, on a comment-by-comment basis, the agreements reached regarding the January 11, 1993 letter. The next section groups the February 3, 1993 comments into categories according to the nature of the resolution of those comments. Following that is a summary of other significant commitments made at the meeting. Finally, a schedule is presented for submission of the revised documents.

LETTER OF JANUARY 11, 1993

1. The Phase I Tech Memo will be revised and supplemented to address each of the topics related to the Phase I preliminary modeling and the design of Phase II work. It was agreed that this comment is not intended to require additional modeling for the Phase I work, but rather to point out issues which will be relevant to the U.S. EPA review of the Remedial Investigation (RI) Report, following the Phase II work.

- The requested explanations will be added to the Phase I Tech Memo. The appropriateness of a steady-state groundwater flow model and the kind of observations that might be made during the Phase II work, which could affect the representativeness of a steady-state model, will be identified.
- 3, 4. These adjustments will be made to the Phase I Tech Memo, consistent with items 1 and 2 above.
- 5. The explanation in the Modeling Tech Memo will be expanded to explain the specific applicability of the model to the Waukegan Coke Plant site. The changes in the way the model will be used and the quantity and quality of data expected to be available for modeling from Phase I to Phase II will also be presented.
- 6. The revised Phase I Tech Memo will include a discussion of the general sensitivity assessments that have been done and the simplifying assumptions that have been made. The data gaps identified as a result of the Phase I investigation and modeling will be summarized.
- 7, 8. These corrections will be made.
- 9. The Phase I Tech Memo presentation of the contaminant fate and transport modeling will be expanded. We understand that the modeling done in Phase II, if not calibrated, should have a discussion of the uncertainties involved in making projections with the model. For instance, the likely presence of multiple sources that change over time and space would affect the level of confidence in predictions made for contaminants migrating from those sources.

Concluding Paragraphs. The design of the Phase II groundwater investigation will be reviewed with these comments in mind. Specifically, the collection of additional water level data between the existing easterly wells and Lake Michigan and obtaining appropriate data for predicting future contaminant loadings to surface water bodies will be explored.

LETTER OF FEBRUARY 3, 1993

The agreements reached regarding the comments in this letter are grouped according to category. The categories are: (1) implement or provide added explanation; (2) offer a revised proposal; (3) related to the RI Report; and (4) resolved at the meeting. The comment numbers are listed under the category in which they fall. Notes regarding details of the understandings reached at the March 5 meeting are provided for selected comments.

Category 1: Implement or Provide Added Explanation

Incorporation of changes to address the following comments was agreed at the March 5, meeting: 1, 7, 9, 11, 12, 13, 14, 17, 18, 24, 26, 27 (second and fourth bullets), 29, 31, 32, 33, 35 (second bullet), 36 (second bullet), 39, 44, 48, 49, and 50. Incorporation of changes to address the following comments will be pursuant to the adjustments and interpretations noted below.

- Details of this are presented under the January 11, 1993 letter discussion above.
- 10. The revised text will specifically note that VOC detection limits are generally unaffected by elevated semivolatile concentrations.
- 16 (Last sentence only). A technical discussion of the laboratory practices that allow the reporting of contaminant concentrations down to 10 percent of the named detection level will be provided.
- 19. No figures will be added.

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- 21. The revised text will note that these parameters are analyzed in groundwater samples in Phase II.
- 23. The word "site" will be corrected to "facility" or "within property boundary."
- 27. (First bullet). During placement of the well nests near P-101, samples will be screened using the field procedure to select samples for laboratory analysis in accordance with the Phase I pilot boring placement procedures.
- 27. (Sixth bullet). The previous soil borings, slip construction, and test trenches will be noted in the text.
- 30. Item 1 will be added, item 2 will be in the RI, and items 3 through 5 will reference the Field Sampling Plan (FSP) or be added, if they are not already addressed in the FSP.
- 32. Consistency with the FSP will be maintained.
- 35 (Fourth bullet). Text will be revised to note construction will be in accordance with the FSP. The monitoring of this well is more closely related to evaluation of remedies than to characterization of environmental conditions.
- 46. The text will note that groundwater quality will be used to estimate site impacts on surface water quality.
- 42. The text will clarify that the method number merely defined a parameter list.

Category 2: Offer a Revised Proposal

These items will be evaluated further or may require additional discussion with the U.S. EPA and its subcontractors. The revised Tech Memo will propose

these programs with sufficient rationale for the U.S. EPA and IEPA reviewers to understand the purpose being served.

- 4. Barr and PRC will discuss the objectives of the 0 to 6-inch samples and will work with PRC to come to agreement on what the samples will represent for risk assessment purposes. It is intended that the sampling intervals not overlap between the intervals for direct exposure evaluation, the interval above the groundwater table and below the direct exposure depth, and the below groundwater table evaluation.
- 15,22,27. (Tenth bullet). After eliminating BS-03, the parameters for Phase II soil analysis will be reevaluated. It was agreed that the evaluation will include elimination of any parameter below background concentration and elimination of parameters not characteristic of coal tar sites, such as chlorinated solvents. In addition, the revised Phase I Tech Memo is to incorporate appropriate additional evaluation criteria, such as typical background concentrations, and exposure considerations. The evaluation will pay close attention to the appropriateness of including lead for Phase II.
- 20, 51. Barr and PRC will discuss this to try to obtain the best information from the appropriate media.
 - 27. (Third bullet). The locations and depths of sampling and the nature of the sampling points will be reevaluated in light of Agency concerns about flow pattern and the quality of water potentially discharging to Lake Michigan.
 - 27. (Seventh, eighth, and ninth bullets), 37, 38. Three soil boring locations outside the DNAPL area will be identified in the work plan as the locations at which samples for geotechnical parameters should be collected. Hydraulic conductivity samples will be collected far

from the OMC slip area, insofar as possible. The geotechnical sample collection borings will be extended 10 feet into the till.

- 34. This will include a discussion of sample preparation to mimic soil processing that would occur prior to application of a treatment technology, such as thermal treatment or soil washing.
- 35 (First bullet). The need for and locations of these wells may be revised if OMC wells are available and there is adequate documentation of their geologic situation and construction.
- 40. The plan for handling pump test water will be laid out in greater detail, including the location at which the water would be discharged. Consistency of the plan with the U.S. EPA guidance for investigation-derived wastes will be noted. Consideration will be given to using an NPDES permit or the North Shore Sanitary District treatment works for future discharges from the site.
- 41. This will be addressed in a manner similar to Comment 40, maintaining consistency with the FSP.
- 43. It was agreed that HydroPunch samples need not be collected at depths equivalent to shallow wells and that the text will reflect that HydroPunch sampling will be done during well installation work.
- 45. PRPs will review the appropriateness of Lake Michigan sampling and are free to propose or not propose sampling according to their evaluation.

Category 3: Related to the RI Report

These comments will affect the RI, but will not be incorporated in the Phase I Tech Memo or Phase II Work Plan:

Agreed.

- 3. Treatment evaluation samples may be collected from auger flights.
- 5. U.S. EPA to provide this data. It is to be used in the Phase II Work Plan development, if available in a timely manner; otherwise, it is to be incorporated in the RI.
- 25. It was agreed that the reports containing this information could be referenced in the RI and the information relevant to the site could be extracted and summarized in tables and discussions in the RI.
- 30. Item 2 will be in the RI; the other items are Category 1 above.
- 47. The issues arising from this comment are deferred until additional data on potential loadings to the surface water or actual concentration in the surface water are determined in Phase II.

Category 4: Resolved at the Meeting

These comments were resolved at the meeting and no further response is needed in the Phase I Tech Memo or otherwise.

6, 16. (First three sentences), 27 (Fifth bullet), 28 (First sentence).

OTHER COMMITMENTS

As we discussed on March 12, 1993, the U.S. EPA has obtained access to hydrogeologic and water quality data gathered during the work at the adjacent/ overlapping Superfund site. The PRPs are to arrange details of reviewing and receiving copies of the data through Glen Lenzi of OMC. We will seek maps showing the locations of monitoring points, well logs and boring logs, water level measurements, and water quality reports. We will also request any maps showing previous interpretations of water information, such as groundwater flow maps or contaminant plume maps.

North Shore Gas will promptly open discussions with OMC regarding site access for the purposes of the Phase II investigation, specifically, site access to the OMC Plant No. 2 property for obtaining water levels, water samples, and placement of additional wells.

The ARARs and PRGs Technical Memorandum revision and resubmittal are suspended until further notice from the U.S. EPA.

SCHEDULE

As we discussed on March 12, North Shore Gas is to complete the revisions and resubmit the Phase I Tech Memo and the revised Modeling Tech Memo to the U.S. EPA 30 days from the time of our meeting, which we agreed will be by the end of business, April 5, 1993.

CLOSING

If you do not concur with the understandings, agreements, and other representations set forth in this letter, please advise us promptly in writing. We are proceeding on the basis of the program of revisions and schedules outlined above.

James R. Langseth

JRL:crs

c: Tracy Fitzgerald
Patrick Doyle
Jerry Picha
Margaret Skinner
Marianne Grammer
Russell Selman
James Campbell
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